

ABSTRACT OF THE DISCLOSURE

A balloon catheter including an inflatable balloon affixed to a catheter. The proximal end of the balloon is affixed to the distal end of the catheter so as to provide an air tight seal there between. A stiffening member extends distally of the distal end of the catheter and forms a slip joint connection with the distal end of the balloon to permit the distal end of the balloon to axially move or translate relative to the distal end of the catheter. The slip joint allows the axial length of balloon to change during inflation or deflation without transferring tensile or compressive forces between the balloon and the catheter, thereby preventing transverse creases from forming in the surface of the balloon and preventing the catheter from bowing. The stiffening member provides alignment and lateral support to the distal end of the balloon.

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